

SURREBUTTAL TESTIMONY

OF

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SOUTH CAROLINA PUBLIC SERVICE COMMISSION

DOCKET NO. 92-209-E

In its rebuttal to my testimony, CP&L presents itself as two completely different companies. On the one hand, CP&L states explicitly that it will not and should not aggressively pursue conservation. It contends that direct utility funding and aggressive intervention is not appropriate, not necessary, and not consistent with CP&L's least cost planning objectives. On the other hand, CP&L insists that its 1992 IRP does constitute a serious conservation effort. The fact is, as CP&L's policy statements, its planning process, and its proposed DSM portfolio and program design make clear, CP&L has not put conservation resources on an equal footing with supply and has not committed to the objective of reducing resource costs.

I. CP&L Policy Statements

CP&L asserts that it is not its proper role to promote cost-effective conservation. Rather, CP&L sees it as its very obligation to provide "reliable service at minimum cost" (emphasis added) (Harris, p.1). CP&L's viewpoint would be consistent with least cost planning principles if meant as an endorsement of the primary objective of least cost planning: the minimization of the long-run costs of providing adequate and reliable energy services to customers. But CP&L seeks to minimize rates, not costs.

Dr. Harris characterizes DSM as the substitution of "paternalistic and centralized planning" for consumer choice. He limits his disapproval to utility marketing and conservation measures; it does not extend to CP&L's promotion of heat pumps, thermal energy storage, electrotechnologies and other load-management and load building DSM options. Nor does Dr. Harris acknowledge the effect of large-scale utility construction decisions on consumer choice. He fails to recognize that unlike utility supply investments, DSM programs do give the consumer a choice. Utility funding of DSM does not force the customer to invest in energy-efficiency; it simply provides the opportunity. By improving access to energy efficiency measures, cost-effective conservation programs give customers greater, not less, control over the size of their bills. The goal in the long term of utility conservation programs is to improve the marketplace, not replace it.

CP&L also contends that utility-funded conservation is not necessary. Dr. Harris acknowledges barriers exist, but they are not great enough to justify aggressive utility intervention in consumers' energy efficiency decisions. If consumers do not invest in cost-effective conservation, he contends, they must have good reason, and analysts have simply overlooked some costs and benefits. Dr. Harris does not specify these other factors that make energy efficiency unattractive to consumers. Nor does he attempt to refute the many market barriers that I have identified in my prefiled testimony. Instead, Dr. Harris disputes what is actually a complete misrepresentation of my testimony: my supposed assumption that the primary barrier that DSM seeks to address is consumer

ignorance and irrationality. It is CP&L, in fact, that appears to believe that information costs are the primary barrier; after all, CP&L limits its conservation efforts largely to information-only programs. It is my testimony, on the other hand, that information-only programs are not effective precisely because they do not address the dominant market barriers, such as limited access to capital, high customer discount rates, institutional impediments, split incentives (for example, between renters and landlords, and between developers and homebuyers), insufficient stocks of high-efficiency equipment, an aversion to dealing with contractors, lack of time, inconvenience, and risk perception.

Where market barriers do exist, Dr. Harris states, they should be addressed in the least costly way. I agree. CP&L should seek to acquire all cost-effective DSM at the lowest cost to the utility. The Company should design its programs to minimize utility costs for a given level of savings. It is important to keep in mind that the customer incentive is not the only factor that determines customer participation (as noted in my prefiled testimony on pages 31 and 32). Contrary to the representations of Dr. Harris, my testimony does not recommend "unlimited incentives."

Dr. Harris recommends loans and audits as the lowest cost utility response to market barriers. CP&L's 1992 IRP would be much closer to a least cost plan if CP&L had proposed comprehensive audit-and-loan programs, with careful and documented projections of savings and costs, and with detailed evaluation and monitoring plans to test the actual program effectiveness. But the loan programs that CP&L proposes in its 1992 IRP are limited merely to home

insulation and heat pump promotions for existing residential customers. Furthermore, CP&L has not designed its programs to minimize the utility cost for a given level of savings. For example, the Common Sense Home program has such low minimum requirements for insulation and heat pump efficiency, that it winds up paying through rate discounts to all participants for very little, if any, improvement over baseline construction practices.

CP&L's position that additional conservation programs do not belong in its least cost plan is based on an assertion that conservation does not match CP&L's "load shape objectives" and will not be useful until 2006, the year of the first baseload capacity addition. As I explained in my prefiled testimony (on pages 90 and 91), the absence of a near-term need for base load capacity in no way justifies rejection of conservation resources that are currently cost-effective. CP&L's witnesses do not address my prefiled testimony on this issue.

CP&L's "load shape objectives" are not even consistent with its own load projections and program design and assessment. According to CP&L's own analyses, the winter is clearly not a "valley" and winter peak demand contributes to the Company's need for capacity. CP&L projects that its winter peaks will be very close to its summer peaks and for some years the system will be step-peaking (IRP, p. 3-20). For participants in the Large Load Curtailment program, curtailments are expected to occur in winter as well as in summer. In estimating the net benefits of the program, CP&L assumes an average of eight capacity curtailments, six in the summer and two in the winter. Furthermore, in its program evaluations

(presented in Appendix D of the 1992 IRP), CP&L estimates that increases in winter peak demand will result in increased capacity costs. For example, the High Efficiency Heat Pump program is assumed to reduce summer peak but increase winter peak. The RIM test, the only test performed for this program shows a net increase in capacity costs due to this program despite the projected reduction in summer peak.

## II. CP&L's Screening Process

CP&L's rebuttal witnesses essentially advocate the RIM test as the primary basis for screening DSM programs. According to CP&L, primary reliance on the TRC test would mean sole reliance on the TRC test. They misinterpret my testimony that the RIM test should have no role in economic screening as a recommendation that rate impacts and economic development in the region be ignored. To the contrary, as I stated clearly in my testimony (and explained at length on pages 10 through 15), primary reliance on the TRC test does not mean sole reliance. Such factors as rate impacts, utility costs, and acceptability to participants should be taken into account, but it is important to establish the role that each test should have in the screening/design process and to structure each test accordingly in order to provide the needed information. The TRC test should be the basis for deciding whether a DSM measure or option is cost-effective. Rate impacts should be examined, but the standard present-value RIM test should not be the basis for judging rate impacts or for rejecting DSM options.

Furthermore, primary reliance on the TRC test will further, not hinder, economic development in the region. It is the perpetua-

tion of a business-as-usual, energy-inefficient economy with excessive utility construction and operating costs that will hurt the competitive position of North Carolina.

Mr. Williams turns to the California Standard Practice Manual for Economic Evaluation of DSM Programs and the EPRI Technical Assessment Guide in an attempt to support CP&L's reliance on the RIM test to exclude conservation programs and to justify load-building programs, regardless of their cost-effectiveness. In fact, these documents clearly reject CP&L's position. First, neither document supports CP&L's contention that the Company's RIM test, a RIM test that looks only at the effect of a program on rates, is the only test that indicates rate impacts. The California manual (pages 17-23) directs that a number of different rate impact tests be performed, specifying tests that address the effect on customers' bills (not rates). The EPRI Guide cautions that reliance on the RIM test of the form used by CP&L will lead to the rejection of most conservation programs, as long as rates are higher than marginal costs (page 1-19). As a result, it recommends that

the cost effectiveness results of this test should be qualified by the information contained in the Lifecycle Revenue Impact. Even though a program may show a large negative net present value or a benefit-cost ratio that is substantially less than 1.0 [under the standard RIM test], the resulting rate change as measured by the LRI-RIM may be negligible.  
(page 1-19)

Though there are better ways of incorporating consideration of rate impacts into the least cost planning process, in recommending the LRI-RIM test, EPRI recognizes that the planner must consider the net revenue effect of the program in relation to total Company revenues.

Second, to support CP&L's sole reliance on the RIM test for all programs that promote "strategic load growth" or are exclusively "valley filling", Mr. Williams completely misinterprets the statement in the California Manual that the "TRC test cannot be applied meaningfully to load building programs." The Manual carefully distinguishes programs that promote fuel-switching from other load-building programs (pages 2-3). The statement cited by Mr. Williams refers to load-building programs like CP&L's Safeshine program, not to fuel-switching programs like the High Efficiency Heat Pump program. The Manual defines the TRC test specifically to include the analysis of the economics of fuel switching programs:

For fuel substitution programs, the [TRC] test measures the net effect of the impacts from the fuel not chosen versus the impacts from the fuel that is chosen as a result of the program. TRC test results for fuel substitution programs should be viewed as a measure of the economic efficiency implications of the total energy supply system...(page 25)

The EPRI Guide recommends the same TRC analysis for fuel-switching programs (page 4-23 through 4-28).

Finally, according to both the California and the EPRI guidelines, CP&L's formulation of the RIM test is not appropriate for fuel-switching programs. Both documents direct that any rate impact test take into account net revenue losses associated with reductions in the use of the alternative fuel (California Manual, page 17; EPRI Guide page 4-25).

When faced with the prospect of minimizing bills, CP&L has reacted with a hysterical litany of objections to integrated least cost planning: "paternalistic", "sole reliance on the TRC test" with no consideration for rate impacts, "unlimited incentives", and

"massive market interventions." The Commission should instruct CP&L ~~and NCP~~ to discard <sup>its</sup> ~~their~~ uneconomic load promotion efforts and to adopt the objective of reducing resource costs, as Duke has in its 1992 IRP.

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